

HIM, GOOD and the HIMS



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6 January, 2011

Agenda

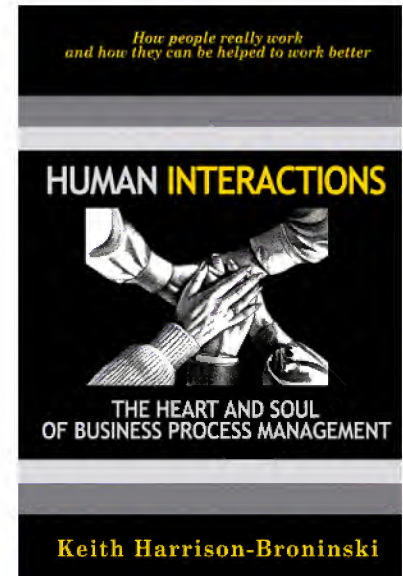
- How to improve collaborative work?
- How to manage enterprise-scale change?
- How to take enterprise technology beyond *communication* into *collaboration*?

Agenda

- How to improve collaborative work?
- How to manage enterprise-scale change?
- How to take enterprise technology beyond *communication* into *collaboration*?

Transforming work

- “Human Interactions” (2005)
 - “the overarching framework for 21st century business technology”
Editor, CIO Magazine
- The standard, peer-reviewed theory of **collaborative human work**
 - <http://bit.ly/him-theory>
- Principles and patterns for effective, efficient, adaptive knowledge work
 - Can be used without supporting technology
 - Spreadsheet-based consulting method enough to **introduce transparency** and **double productivity**



HIM Testimonials

- After spending significant time analyzing release management activities using mainstream process notations, the Business Support Group (EMEA) of Sun Microsystems switched to HIM notation, and **within 2 weeks** had captured, agreed and improved the entire process.
- Praxis High Integrity Systems **halved the effort** required to fix faults via creation of a HIM-based lab.
- PCG Campbell used HIM to make a **paradigm shift** to better understanding of individual roles and decentralized, goal-driven management practices.

The 5 Principles of HIM

1. Build effective teams
2. Communicate in a structured way
3. Create, share and maintain knowledge
4. Align your time with strategic goals
5. Negotiate next steps as you work

Under the hood - the HIM Model

<u>How to Work</u> R – Research E – Evaluate A – Analyze C – Constrain T - Task		<u>How to Learn (Research)</u> A – Access I – Identify M - Memorize		<u>Work and Workers</u> Human Driven Work or Mechanistic Work Interaction Worker or Independent Worker		<u>Conversations</u> For Possibility Do we want to work together? For Disclosure On what basis? For Action Request/Promise Offer/Accept Report/Acknowledge		<u>Levels of Control</u> Strategic External to work process Overall sponsor Defines key deliverables/metrics Executive External to work process Accountable/informed /consulted Refines deliverables Defines key Roles/Interactions /Activities Management Internal to work process Responsible Refines initial process Facilitates/monitors process and its evolution	
<u>Users</u> Identity Physical Location Virtual Location Relationships User Type Capabilities (knowledge and experience) Organizational Authority Characteristics		<u>User Characteristics</u> Action Shaper Implementer Finisher People Coordinator Teamworker Investigator Cerebral Plant Evaluator Specialist Leader Manager Executive Strategist		<u>Activities</u> Units of work Include one or more Tasks Atomic Transactional: Failure of any Task => undo of all Tasks		<u>Roles</u> Goals Responsibilities Interests and Agreements Information (private) References to other Roles Capabilities (powers and permissions) Process Authority		<u>Speech Acts</u> Intended Manner (aka Illocutionary Force) Assertive Directive Commissive (Promise, Intention) Expressive Declarative Intended Effect (aka Performative)	
				<u>Interactions</u> Asynchronous Exchange of Information Exchange of Intent (Speech Acts)		<u>Resources</u> Offline / online Information within Role Atomic – digital Shared by Role			
		<u>States (Rules)</u> Pre-Condition Post-Condition		<u>Interaction Patterns</u> For deciding on next steps Agreement For doing work Collaborative Transaction					

Users of HIM don't see the model ...

HIM users see Plans

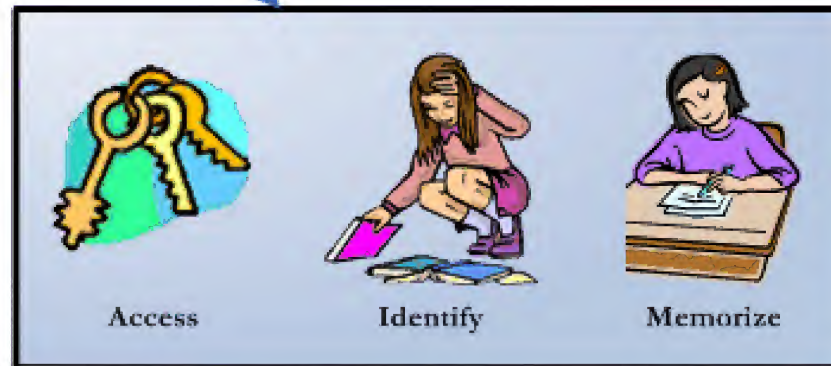
- **Plans** contain **Stages** with different purposes
 - In each Stage, people play **Roles** to provide **Deliverables**
 - Stage members have access to its Deliverables
 - **Messages** sent in a Stage go to all Stage members
- **Plan owner** oversees work
 - Creating Plans from **Templates**
 - Starting, ending, adding, removing and changing Stages
 - Others have more limited options for Plan change

HIM users see patterns for work

- REACT



- AIM



HIM users see patterns for management

- **Strategic** Control
 - Setting goals and objectives
- **Executive** Control
 - Assigning resources
- **Management** Control
 - Delivering results

Example Plan template as spreadsheet

Stage	Role	Activity	Deliverables	Deliverable Type
Dispute	Case Administrator	Explain Basis	Explanation	Uploaded File
			Explanation Summary	Multi-line Text
		Attribute To Third Party	Agree Third Party Responsible?	Checkbox
			Pursue Third Party?	Checkbox
	Case Supervisor			
	Infringer	Counter Claim	Dispute Reason	Uploaded File
			Dispute Reason Summary	Multi-line Text
		Attribute To Third Party	Third Party Name	Single-line Text
			Third Party Organization	Single-line Text
			Third Party Contact Details	Multi-line Text
			Assign Lawyer	Infringer Lawyer Name
		Infringer Lawyer Organization		Single-line Text
		Infringer Lawyer Contact Details		Multi-line Text
Legal Correspondence	Case Administrator			
	Case Supervisor			
	Infringer	Respond	Infringer Response	Uploaded File
			Infringer Response Summary	Multi-line Text
		Propose Mediation	Infringer Mediator Name	Single-line Text
			Infringer Mediator Organization	Single-line Text
			Infringer Mediator Contact Details	Multi-line Text
			Infringer Lawyer	Respond
	Infringer Lawyer Response Summary	Multi-line Text		
	Propose Mediation	Infringer Lawyer Mediator Name		Single-line Text
		Infringer Lawyer Mediator Organization		Single-line Text
		Infringer Lawyer Mediator Contact Details		Multi-line Text
	Supervising Lawyer			
	Paralegal	Submit Demand	Demand Letter	Uploaded File
			Formal Undertakings	Uploaded File
			Demand Date	Date

Benefits of HIM

- Turn chaos into order
 - Replace byzantine, unusable flowcharts (GANTT charts, documents, ...)
 - With clear, simple descriptions
 - That everyone can understand
- Provide a basis for managing work
 - Assign responsibilities
 - Control statuses of Stages and deliverables
 - Distinguish Plans and sub-Plans
- Improve **efficiency** and **effectiveness**
 - **Double productivity**
 - Align work with **organizational goals**

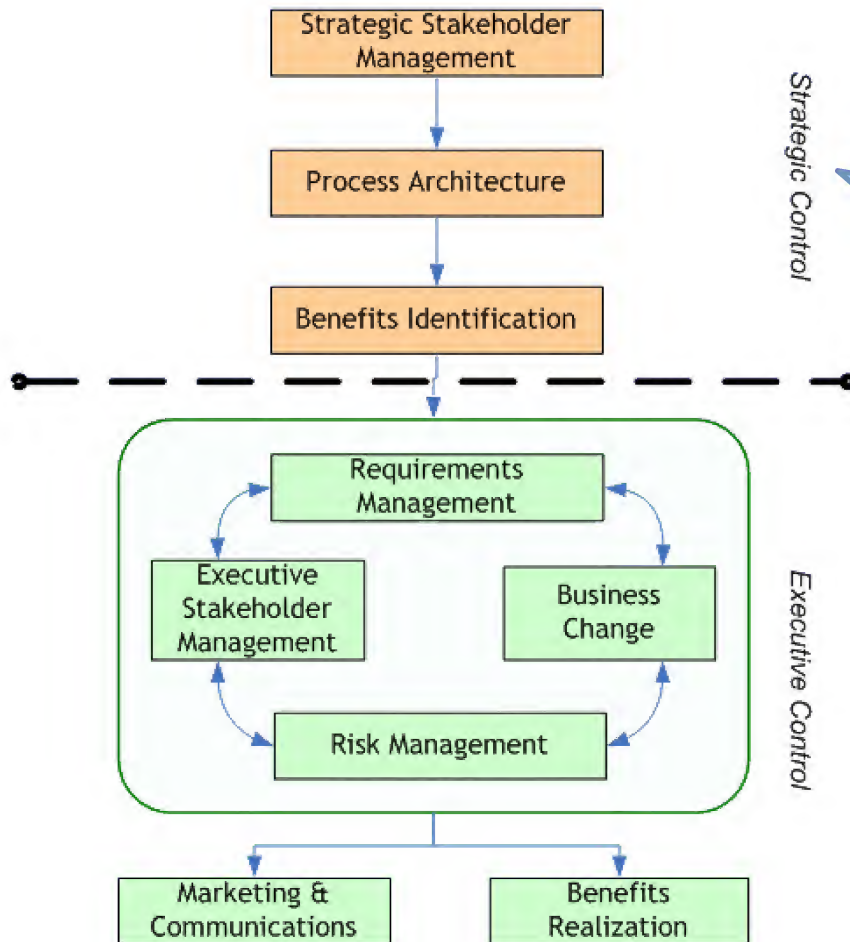
Agenda

- How to improve collaborative work?
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Transforming organizations

- A generic business change methodology
- That integrates high- and low-level activities
- By focusing on **Change Aims**
 - **To ensure that work meets stakeholder needs**
Identify stakeholders, (internal and external, organizational and individual) and communicate with them effectively
 - **To deliver results into a business-as-usual environment**
With all necessary resources in place and without disruption to working patterns
 - **To maximize benefits from outcomes**
Work out in advance what the benefits will be then ensure that the consequent work realizes these benefits
 - **To minimize the costs associated with delivery**
Managing dependencies and risks

Goal-Oriented Organization Design

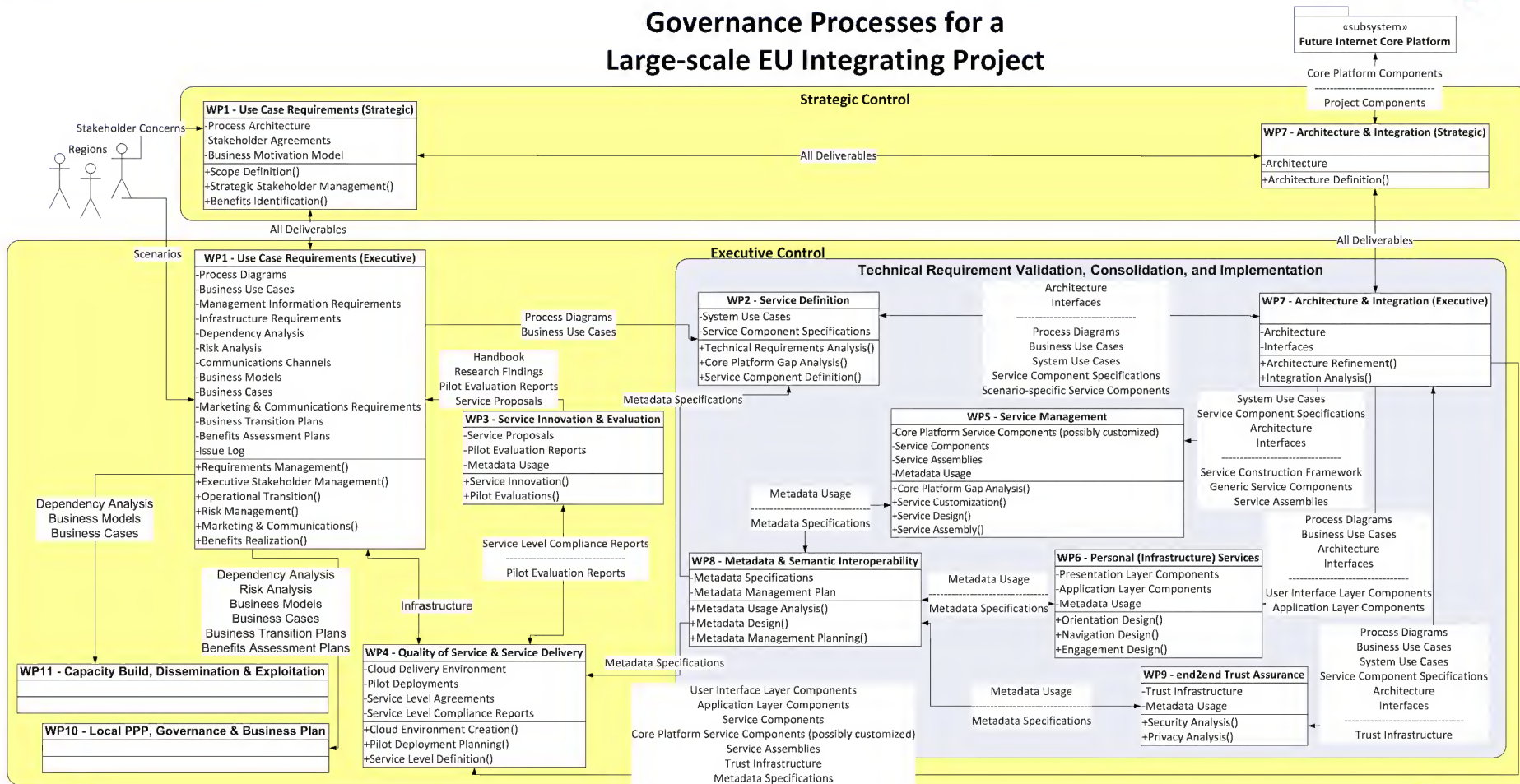


Methodology originally developed for a £300m UK public sector programme, but applies to work of any scale and type

<http://bit.ly/good-methodology>

Example of GOOD Governance

Governance Processes for a Large-scale EU Integrating Project



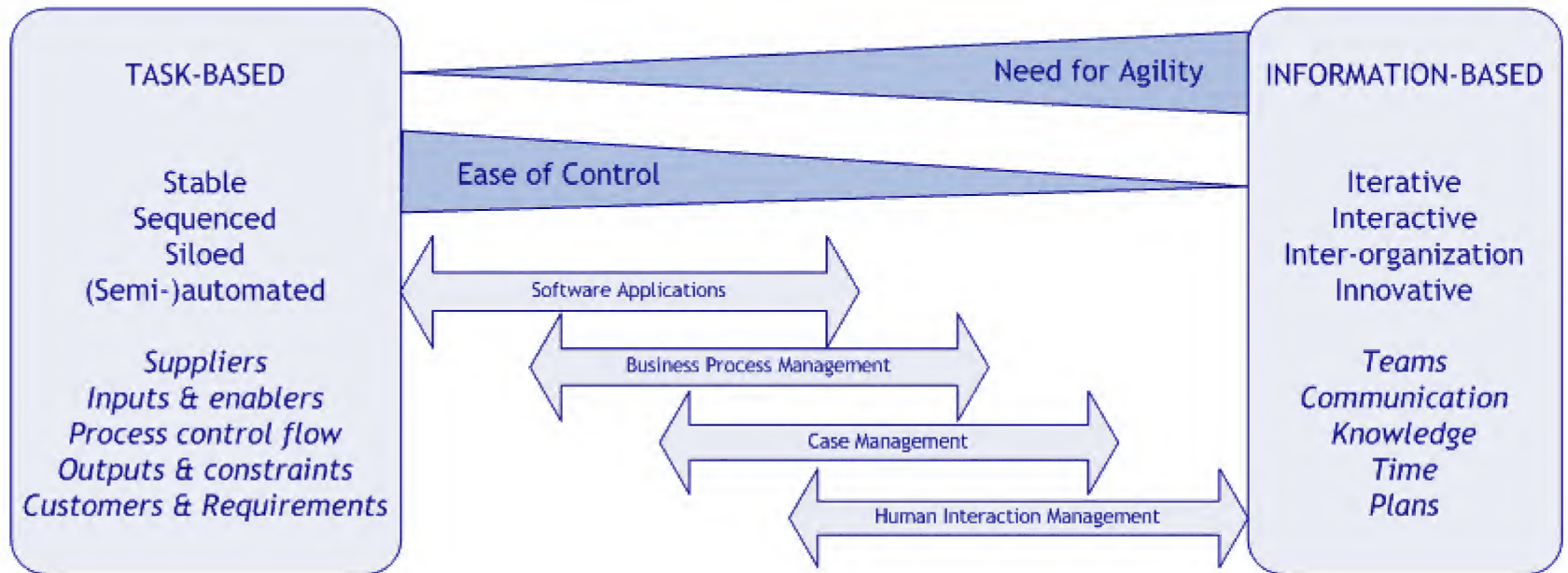
Benefits of GOOD

- Align change with **stakeholder concerns**
- **Integrate** change management activities
- Measure and **ensure success**

Agenda

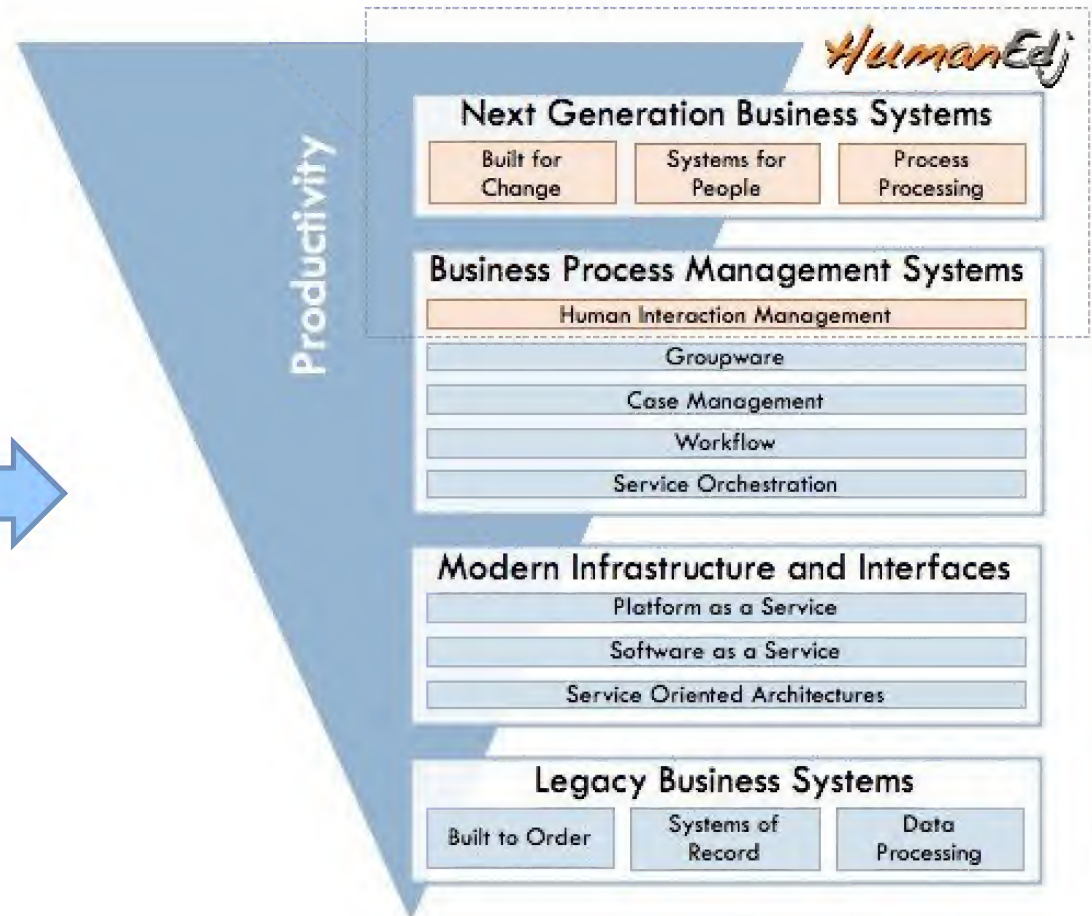
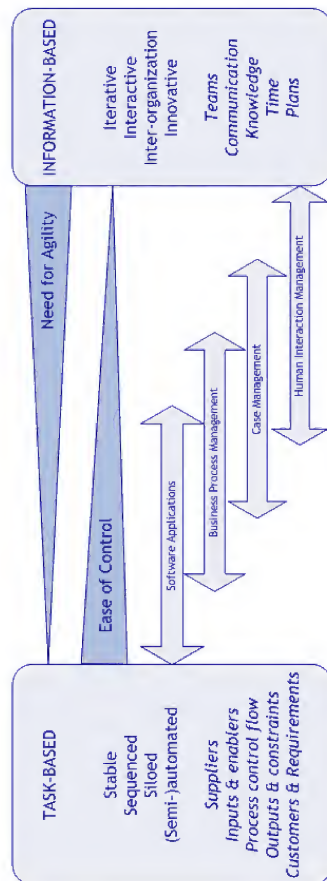
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The Business Process Spectrum



But what to put where in your IT stack?

Next Generation IT Stack



HumanEdj

- Reference implementation of a **Human Interaction Management System (HIMS)**
- **Web software**
to define **templates for collaborative, cross-boundary human work**
then create **adaptive, manageable Plans to do the work itself**
 - Pure Java application
 - API of scalable, stateless REST Web services
 - Customizable AJAX Web UI (jQuery, Freemarker)
 - Windows desktop UI for expert users
 - Cross-platform mobile interface planned
- For **non-technical** users
 - **Average** workshop feedback score from NHS staff over all questions: **9/10**

HumanEdj Testimonials

- “The *first fundamental advance in personal productivity* since the arrival of the spreadsheet”
Information Age
- “The *next logical step* in process-based technology”
Chair, Workflow Management Coalition
- “A HMS is the *top layer of a new IT stack*, in which the Intranet provides access to the enterprise backbone (including ACM and BPM systems) via HMS Plans. HumanEdj has a very powerful and flexible representation of goals, tasks, and tracking of such. It is very much the prototype of what I would like to see in all systems.”
Chair, Workflow Management Coalition Technical Committee
- “The NHS Institute for Innovation and Improvement deployed HumanEdj with a site license in order to *understand and improve collaborative, adaptive, cross-boundary work*. Use of HumanEdj has enabled non-technical business users to transform processes previously modelled as complex, static flowcharts into simple, dynamic Plans.”
Chief Information and Knowledge Officer, NHS Institute for Innovation and Improvement

Example Plan template in HumanEdj

The screenshot shows the HumanEdj Plan Designer interface in a Mozilla Firefox browser window. The title bar reads 'Plan Designer >> Dispute02 - Mozilla Firefox'. The browser's address bar shows the URL 'http://humanedj1:8090/resources/plans/Dispute02+%3A%3A+19-Nov-2010+11%3A'. The interface has a blue header bar with navigation tabs: 'To Do', 'Plan Stages', 'Advanced', and 'Actions'. A user profile for 'Francine Dawes' is visible in the top right corner. A yellow tooltip message states: 'HumanEdj can provide status reports on Plans in which you are not directly involved. Use the field type "Template" to add a template to a high-level Plan.' The main content area is titled 'Dispute02 [TEMPLATE]' and contains a table with four columns: 'Stage', 'Role', 'Activities', and 'Messages'.

Stage	Role	Activities	Messages
1. Image Detection	Case Supervisor Andrew Ramsay	View Legal Proceedings View Legal Disput...	
2. Invoicing			
3. Dispute	Case Administrator Keith Harrison-Broninski	Explain Basis Explanation Explanation Summary Dispute Reason Dispute Reason Su... Attribute To Third Party Third Party Name Third Party Organ... Third Party Conta... Agree Third Party... Pursue Third Party Start Legal Proceedings Infringer Lawyer ... Infringer Lawyer ... Infringer Lawyer ... Legal Proceeding...	

The bottom of the window shows a 'Done' button and a system tray with a clock and network icon.

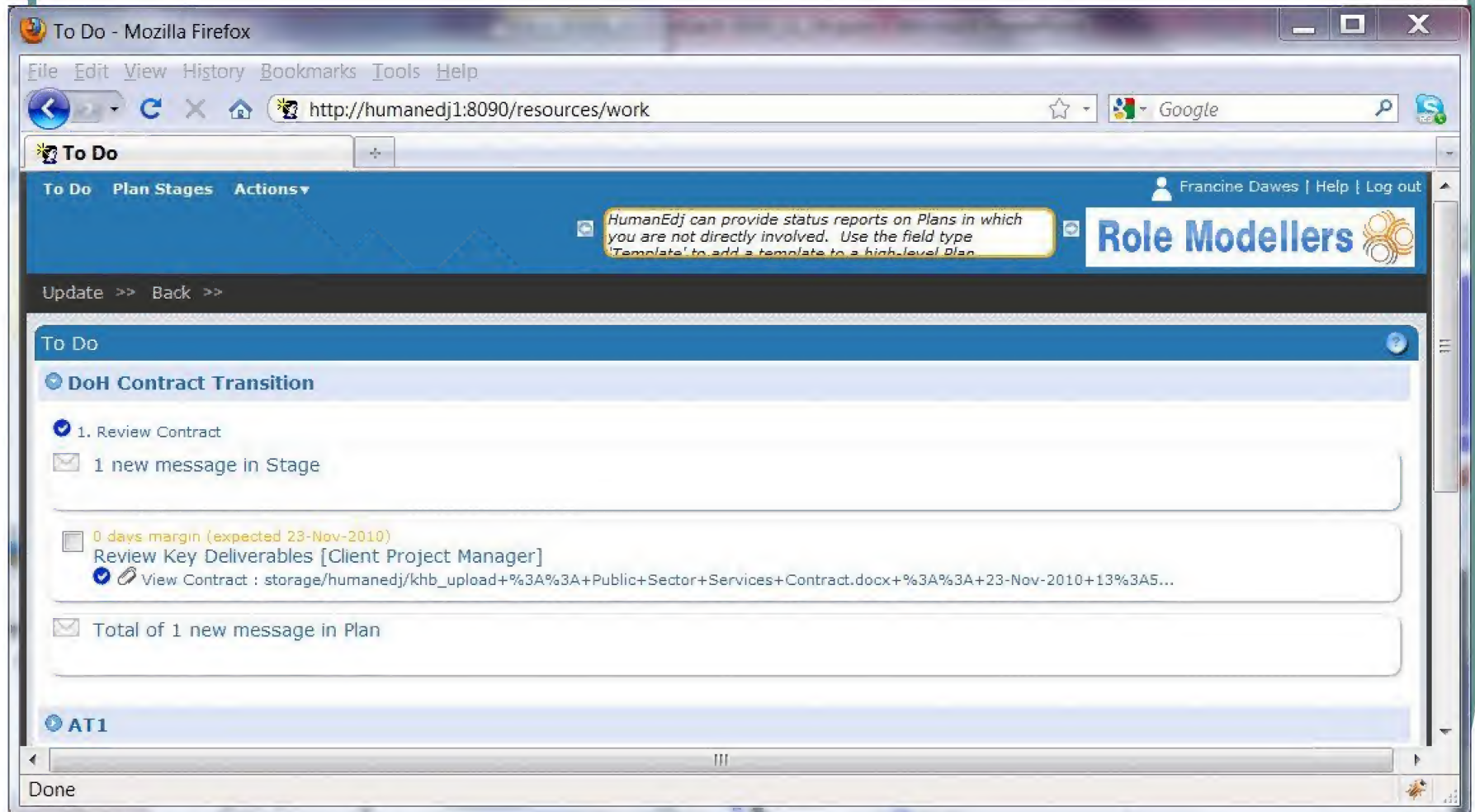
Another example Plan template

The screenshot displays the Plan Designer web application in a Mozilla Firefox browser. The address bar shows the URL: <http://humanedj1:8090/resources/plans/Contract+Transition+%3A%3A+23-Nov-2011>. The application interface includes a top navigation bar with 'To Do', 'Plan Stages', 'Advanced', and 'Actions' tabs. A user profile for 'Francine Dawes' is visible in the top right corner, along with a 'Log out' link. A blue banner at the top contains the text: 'You can send messages in any Stage that your Role belongs to. If you have no Activities in the Stage, click on an Activity in the Stage belonging to another Role.' The main content area is titled 'Contract Transition [TEMPLATE]' and features a table with four columns: 'Stage', 'Role', 'Activities', and 'Messages'.

Stage	Role	Activities	Messages
1. Review Contract	Project Manager Keith Harrison-Broninski	Extract Key Deliverables	
2. Define Process Library		Contract Key Deliverables	
3. Develop Process Library	Client Project Manager Francine Dawes	Review Key Deliverables	
4. Develop Process Tests		View Contract View Key Delivera...	
5. Define Infrastructure			
6. Develop Infrastructure Tests			
7. Implement hardware			
8. Implement software			
9. Transfer Staff			
10. Resource Staff			
11. Train Staff			
12. Roll Out			
13. Lessons Learned			

The bottom of the application shows a 'Done' button and a status bar.

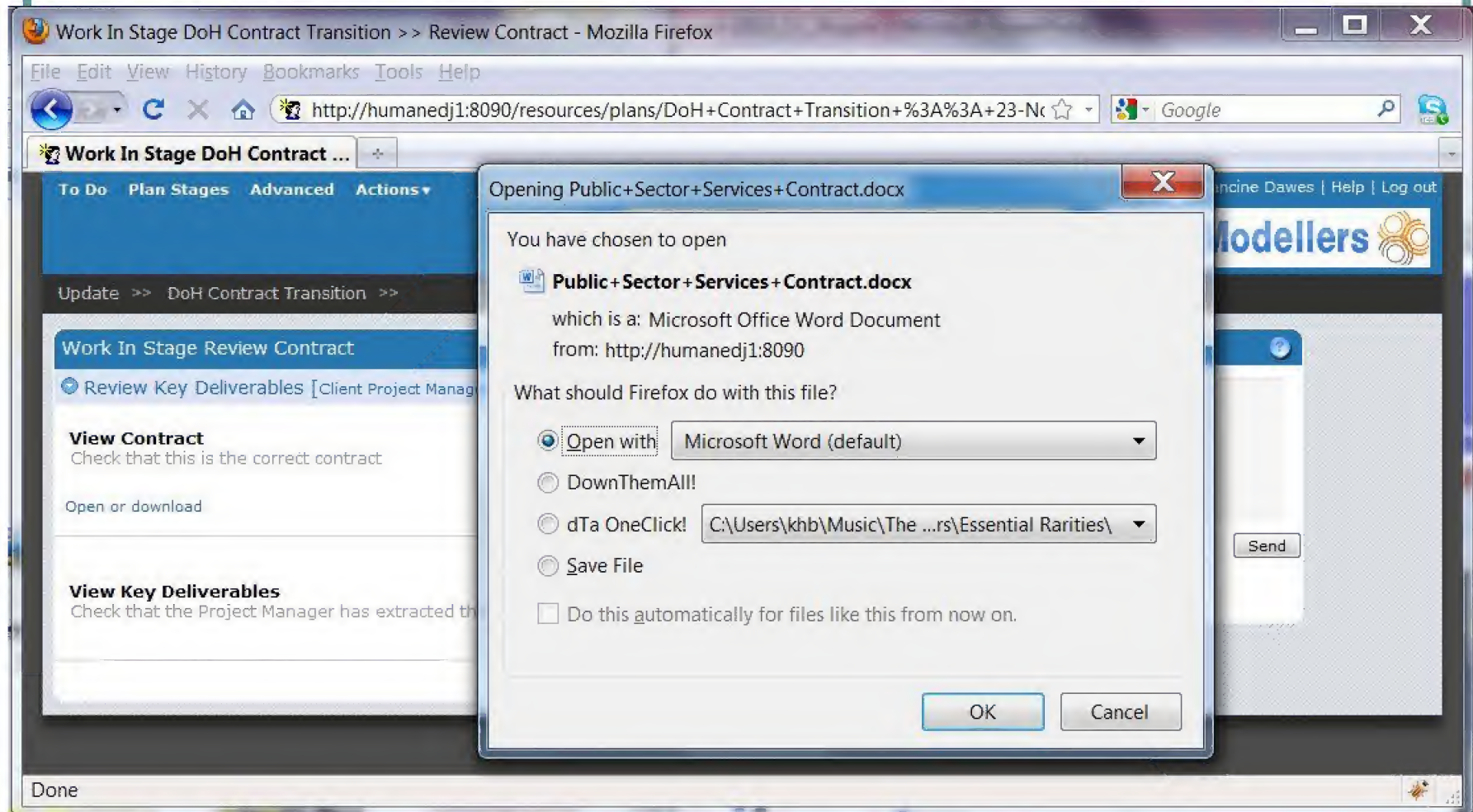
Using a HumanEdj Plan - 1 of 3



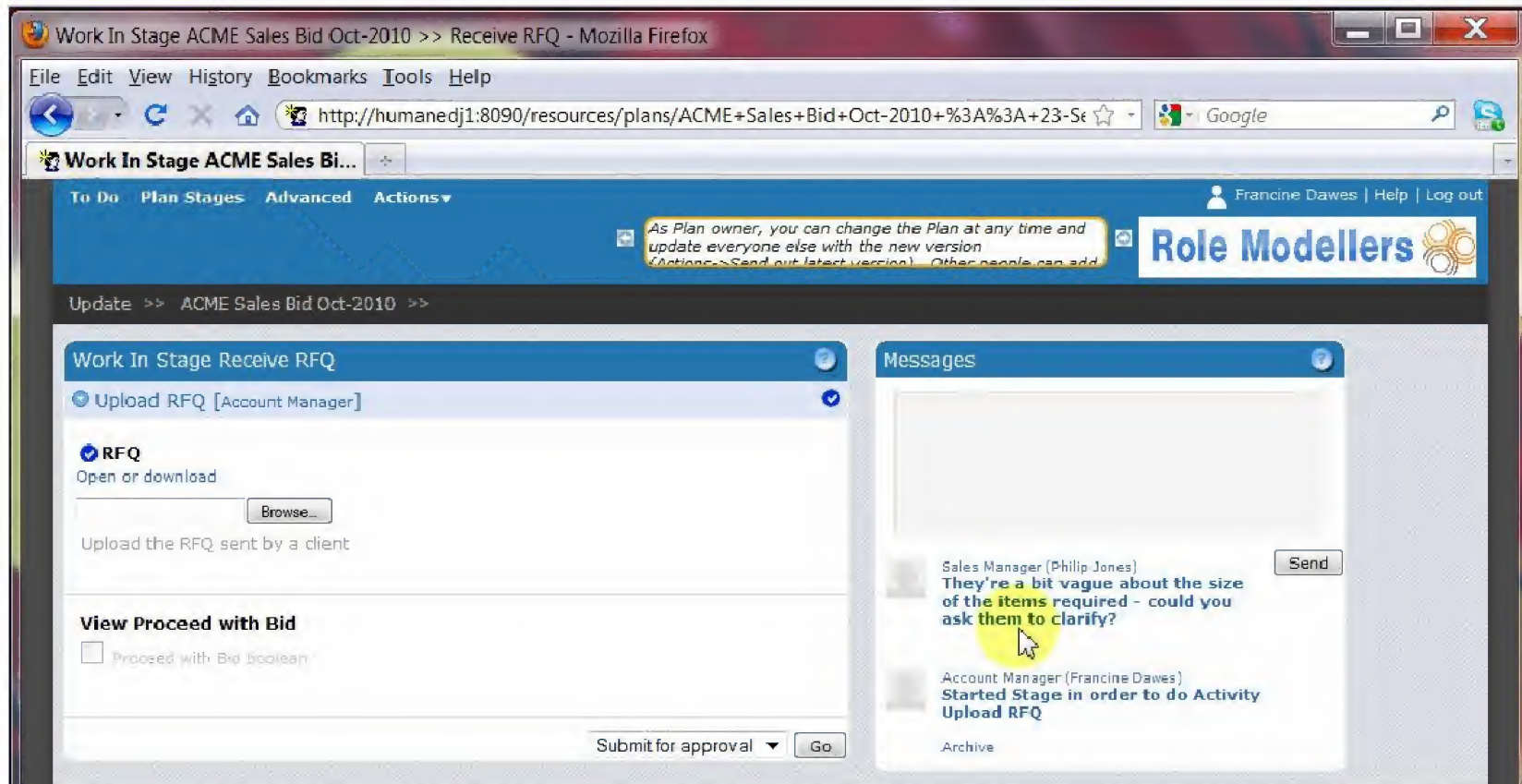
Using a HumanEdj Plan - 2 of 3

The screenshot shows a web browser window titled "Work In Stage DoH Contract Transition >> Review Contract - Mozilla Firefox". The address bar shows the URL: <http://humanedj1:8090/resources/plans/DoH+Contract+Transition+%3A%3A+23-N>. The browser's menu bar includes File, Edit, View, History, Bookmarks, Tools, and Help. The page header features a navigation bar with "To Do", "Plan Stages", "Advanced", and "Actions". A user profile for "Francine Dawes" is visible with links for "Help" and "Log out". A blue banner contains the text: "You can send messages in any Stage that your Role belongs to if you have no Activities in the Stage, click on an Activity in the Stage belonging to another Role." The "Role Modellers" logo is also present. The main content area is titled "Work In Stage Review Contract" and lists activities: "Review Key Deliverables [Client Project Manager]", "View Contract" (with a blue arrow pointing to it), and "View Key Deliverables". The "View Contract" activity description is "Check that this is the correct contract" and includes a link "Open or download". The "View Key Deliverables" activity description is "Check that the Project Manager has extracted the key deliverables correctly". A "Messages" panel on the right shows a message from "Project Manager (Keith Harrison-Broninski)" with the text "Started Stage in order to do Activity Extract Key Deliverables" and a "Send" button. The status bar at the bottom indicates "Done".

Using a HumanEdj Plan - 3 of 3



Structured communication in HumanEdj



Managing work in HumanEdj

The screenshot shows the 'Plan Stages' application running in Mozilla Firefox. The browser address bar displays 'http://humanedj1:8090/resources/plans'. The application interface includes a top navigation bar with 'To Do', 'Plan Stages', and 'Actions' tabs. A user profile for 'Francine Dawes' is visible in the top right corner, along with 'Help' and 'Log out' links. A yellow tooltip message states: 'You can send messages in any Stage that your Role belongs to. If you have no Activities in the Stage, click on an Activity in the Stage belonging to another Role.' The main content area is titled 'Plan Stages' and contains a table with columns: 'Stage', 'Role', 'Activities', and 'Messages'. The table lists two roles: 'Account Manager' (Francine Dawes) and 'Sales Manager' (Philip Jones). Under 'Account Manager', there is a task '1. Receive RFQ' with a status indicator (a yellow circle with a blue checkmark) and a sub-task 'Upload RFQ' with a status indicator (a blue checkmark). Under 'Sales Manager', there is a sub-task 'Review RFQ' with a status indicator (a blue checkmark). A legend on the left side of the table defines the status indicators: 'Not started' (yellow circle), 'Started' (blue circle with a checkmark), 'Approved' (green circle with a checkmark), 'Cancelled' (red circle with an X), and 'Error' (yellow triangle with an exclamation mark). The 'Approved' status is highlighted with a yellow background.

Stage	Role	Activities	Messages
Acme Sales Bid Sep-2010			
1. Receive RFQ	Account Manager Francine Dawes	Upload RFQ	
	Sales Manager Philip Jones	Review RFQ	

Revising a Plan on the fly in HumanEdj

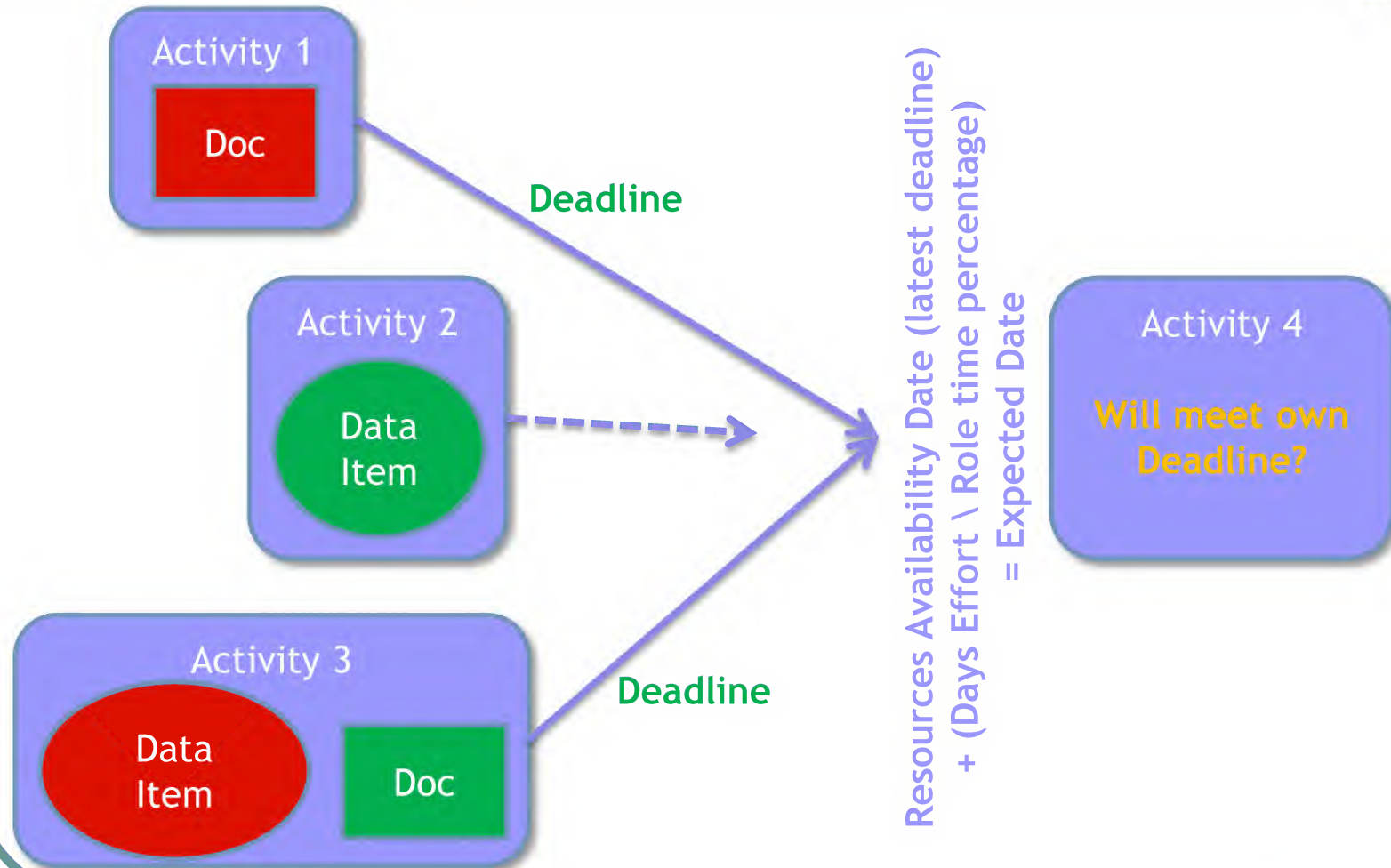
The screenshot displays the HumanEdj web application interface within a Mozilla Firefox browser window. The browser's address bar shows the URL: `http://humanedj1:8090/resources/plans/Acme+Sales+Bid+Sep-2010+%3A%3A+22-Sep-2010`. The application's top navigation bar includes tabs for 'To Do', 'Plan Stages', 'Advanced', and 'Actions'. The 'Actions' dropdown menu is open, showing options: 'Download', 'Send out latest version' (highlighted), 'Mark complete', 'Make template from Plan', and 'New template'. A tooltip message is visible: 'You can send messages in any Stage that your Role belongs to - if you have no Activities in the Stage, click on an Activity in the Stage belonging to another Role'. The main content area is titled 'Acme Sales Bid Sep-2010' and features a table with columns: 'Stage', 'Role', 'Choose template', 'Activities', and 'Messages'. The table lists three roles: 'Account Manager' (Francine Dawes), 'Sales Manager' (Philip Jones), and 'Technical Consultant' (Sarah Small). For the 'Account Manager' role, the activity 'Review Specification' is shown with a '0 days margin (expected 23-Sep-2010)' and a 'View Specification' link. For the 'Sales Manager' role, the activity 'Add Activity' is shown. For the 'Technical Consultant' role, the activity 'Prepare Specification' is shown with a '0 days margin (expected 23-Sep-2010)' and a 'View RFQ' link. The bottom of the interface shows a 'Messages' column.

Fine-grained forecasting in HumanEdj

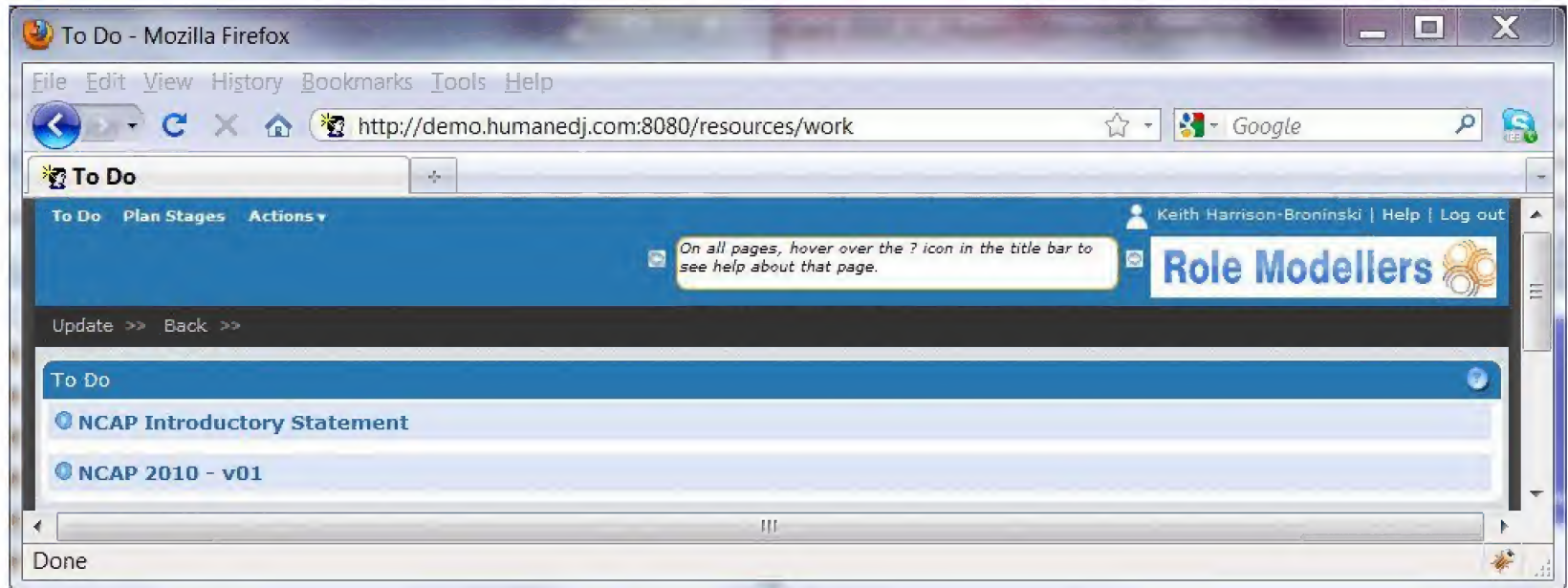
The screenshot displays the 'Plan Overview' for 'Acme Sale...'. At the top, there's a navigation bar with 'To Do', 'Plan Stages', 'Advanced', and 'Actions'. Below this is a status bar with 'Update' and 'Back' buttons. The main content area is titled 'Acme Sales Bid Sep-2010' and shows a '-2 days margin (expected 01-Oct-2010)'. A Gantt chart at the top of the main area shows a timeline with a blue bar representing the plan. Below the Gantt chart, a table lists activities for different roles. The roles are 'Account Manager' (Francine Dawes), 'Sales Manager' (Philip Jones), 'Technical Consultant' (Sarah Small), and 'Tester' (Unassigned). The activities are '1. Receive RFQ', '2. Specification', 'Review Specification', 'Add Activity', 'Prepare Specification', and 'Test Products and/or Services'. The '2. Specification' activity is highlighted with a green checkmark and a '-2 days (01-Oct-10)' margin. The 'Prepare Specification' activity is highlighted with a yellow circle and a '-2 days margin (expected 01-Oct-2010)' margin. The 'Test Products and/or Services' activity is highlighted with a blue circle and a '0 days margin (expected 30-Sep-2010)' margin.

Stage	Role	Activities	Margin
1. Receive RFQ	Account Manager Francine Dawes	Review Specification	0 days margin (expected 29-Sep-2010)
2. Specification	Sales Manager Philip Jones	Prepare Specification	-2 days margin (expected 01-Oct-2010)
	Technical Consultant Sarah Small	Test Products and/or Services	0 days margin (expected 30-Sep-2010)

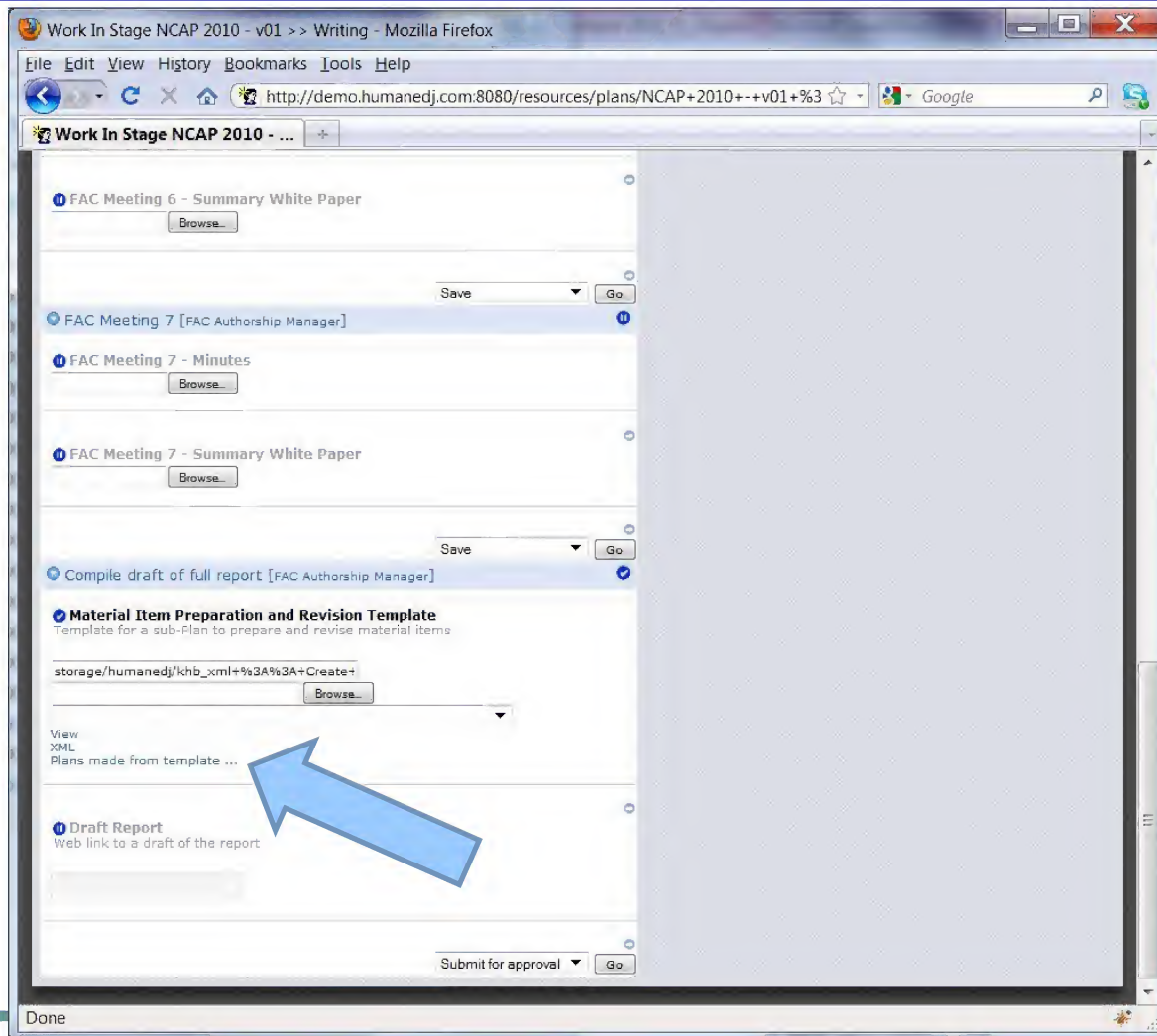
Fine-grained forecasting - explanation



Sub-plans in HumanEdj - 1 of 4



Sub-plans in HumanEdj - 2 of 4



Sub-plans in HumanEdj - 3 of 4

The screenshot shows a web browser window titled "ENTITY NCAP 2010 - v01 >> FAC Authorship Manager >> Material Item Preparation and Revision template - Mozilla Firefox". The address bar shows the URL "http://demo.humanedj.com:8080/resources/plans/NCAP+2010+-+v01+%3A". The page has a blue header with navigation links: "To Do", "Plan Stages", "Advanced", and "Actions". A user profile for "Keith Harrison-Broninski" is visible in the top right corner. A banner for "Role Modellers" is also present. The main content area shows the "Material Item Preparation and Revision template" with details: "Last modified: 22-Nov-2010 16:37:13", "By: FAC Authorship Manager (Keith Harrison-Broninski)", and "View: XML". Below this is a section titled "Make Plan from template" with a "Plan name:" input field and "Make Plan from template" and "Reset" buttons. Further down is a section titled "Plans made from template" with a table listing "NCAP Introductory Statement :: 22-Nov-2010 16:37:49_440" and a "View" link. A blue arrow points to the "View" link. At the bottom of the page is a "Done" button.

Sub-plans in HumanEdj - 4 of 4

The screenshot shows a web browser window titled 'Plan Overview >> NCAP Introductory Statement - Mozilla Firefox'. The address bar shows the URL 'http://demo.humanedj.com:8080/resources/plans/NCAP+Introductory+Stat'. The browser's menu bar includes 'File', 'Edit', 'View', 'History', 'Bookmarks', 'Tools', and 'Help'. The page has a blue header with navigation tabs: 'To Do', 'Plan Stages', 'Advanced', and 'Actions'. A user profile for 'Keith Harrison-Broninski' is visible in the top right, along with a 'Log out' link and a 'Role Modellers' logo. A tooltip message states: 'You can send messages in any Stage that your Role belongs to. If you have no Activities in the Stage, click on an Activity in the Stage belonging to another'. Below the header, there are links for 'Update >>' and 'Back >>'. The main content area is titled 'NCAP Introductory Statement' and contains a table with four columns: 'Stage', 'Role', 'Activities', and 'Messages'.

Stage	Role	Activities	Messages
1. Prepare Material Item	FAC Authorship Manager Keith Harrison-Broninski	Specify Material Item 0 days margin (expected 23-Nov-2010) ✓ NCAP Material It... ⓘ NCAP Material It... View NCAP Materia... ⓘ NCAP Material It...	
	FAC Author John Keck	Create and Edit Material Item 0 days margin (expected 23-Nov-2010) ⓘ NCAP Material Item	

The bottom of the window shows a 'Done' button.

Still not quite enough ...

- Which processes go where in the stack?
- Just about every software product claims support for “tasks”
- How is *work itself* distributed across the stack?



Moving down the stack

<u>How to Work</u>		<u>How to Learn (Research)</u>	<u>Work and Workers</u>	<u>Conversations</u>	<u>Levels of Control</u>
R – Research E – Evaluate A – Analyze C – Constrain T – Task		A – Access I – Identify M – Memorize	Human Driven Work or Mechanistic Work Interaction Worker or Independent Worker	For Possibility Do we want to work together? For Disclosure On what basis? For Action Request/Promise Offer/Accept Report/Acknowledge	Strategic External to work process Overall sponsor Defines key deliverables/metrics Executive External to work process Accountable/informed /consulted Refines deliverables Defines key Roles/Interactions /Activities Management Internal to work process Responsible Refines initial process Facilitates/monitors process and its evolution
<u>Users</u>	<u>User Characteristics</u>	<u>Activities</u>	<u>Roles</u>	<u>Speech Acts</u>	
Identity Physical Location Virtual Location Relationships User Type Capabilities (knowledge and experience) Organizational Authority Characteristics	Action Shaper Implementer Finisher People Coordinator Teamworker Investigator Cerebral Plant Evaluator Specialist Leader Manager Executive Strategist	Units of work Include one or more Tasks Atomic Transactional: Failure of any Task => undo of all Tasks	Goals Responsibilities Interests and Agreements Information (private) References to other Roles Capabilities (power and permissions) Process Authority	Intended Manner (aka Illocutionary Force) Assertive Directive Commissive (Promise, Intention) Expressive Declarative Imperative (aka Perlocutionary Effect)	
		<u>States (Rules)</u>	<u>Interactions</u>	<u>Resources</u>	
		Pre-Condition Post-Condition	Asynchronous Exchange of Information Exchange of Intent (Speech Acts)	Offline / online Information within Role Atomic – digital Shared by Role	
			<u>Interaction Patterns</u>		
			For deciding on next steps Agreement For doing work Collaborative Transaction		

Full
HIM
Model

Integration point
between HMS
and ACM/BPMS

Support HMS Activities with business rules

- For example, using “Adaptive Case Management”
- Business rules provide choice of Tasks
- Knowledge worker selects
 - Tasks to use
 - Order of Task execution

Automate HIMS Activities with a BPMS

- **Orchestrate Web services**
 - To implement routine processes
- **With no human intervention**
 - “Straight-through” BPM processes
- **With limited human intervention**
 - “Human-centric” BPM processes
 - Data entry (e.g., financial data)
 - Decision points (e.g., document approval)

At the top, put Big Processes

- **Overarching**
 - Help managers improve productivity
- **Underpinning**
 - Help IT become more flexible
- **Connecting**
 - Help build partnerships inside and across organizations
- **Remembering**
 - Help organizations improve operations

1 of 4: Overarching processes

- Bring order to chaos
 - In highly collaborative and pressurized conditions
 - Rework typically leads to wasted effort and repeated frustration
- Newsroom platform
 - HIMS for content creation
 - BPMS for transcoding and distribution
- Productivity improved four-fold
 - Example of **Management Control**
 - Use GOOD for higher-level control via a HIMS

2 of 4: Underpinning processes

- Large-scale dynamic processes require **utility IT**
 - Flowcharts too technical
 - Rules too complex
- Customer service planning
 - Huge process across multiple departments
 - No integration needed
 - Under 2 hours to implement in HumanEdj

3 of 4: Connecting processes

- Key enterprise processes cross boundaries
 - Participants may use different servers
 - Participants may have different software
- New project proposal
 - HIMS for collaboration
 - ECM for document storage
- Subsequently extended
 - To all human resource sharing
 - Back to idea origination
 - Forward to project execution with partners

4 of 4: Remembering processes

- Need to improve knowledge work
 - Not just routine work
 - Lean and Six Sigma not enough
- Patient treatment in healthcare
 - HIMS to let patients manage own cases
 - ACM for decision support
 - Business Intelligence to analyse past cases
- Improvement is itself a Big Process

Benefits of HIMS for Big Processes

- Quadruple productivity
- Build dynamic infrastructure
- Make effective partner relationships
- Continually improve knowledge work

More information:

<http://bit.ly/him-theory>

<http://bit.ly/good-methodology>

<http://bit.ly/hims-technology>

<http://bit.ly/humanedj-case-studies>

<http://bit.ly/humanedj-introduction>